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**KIM et al.**(10) **Pub. No.: US 2017/0033440 A1**(43) **Pub. Date: Feb. 2, 2017**(54) **ELECTRONIC DEVICE WITH MULTI-BAND  
ANTENNA FOR SUPPORTING CARRIER  
AGGREGATION USING NON-SEGMENTED  
CONDUCTIVE BORDER MEMBER***H01Q 1/52* (2006.01)*H01Q 9/04* (2006.01)*H01Q 5/50* (2006.01)*H01Q 1/48* (2006.01)(71) Applicant: **SAMSUNG**  
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Dec. 30, 2015 (KR) ..... 10-2015-0189250**Publication Classification**(51) **Int. Cl.***H01Q 1/24* (2006.01)*H03H 7/38* (2006.01)

An electronic device including a multi-band antenna, a cover, a substrate, and a conductive border member is disclosed, where the device includes a first feed terminal connected to a circuit of a substrate embedded in the device, a second feed terminal connected to the circuit and insulated from the first feed terminal, a ground disposed on the substrate, a conductive border member continuously disposed along a periphery of the electronic device, a first antenna connected to the first feed terminal and the conductive border member, and the first antenna forming a multiple resonance for covering a first multi-band having a plurality of bands, a second antenna connected to the second feed terminal and the conductive border member and the second antenna forming a multiple resonance for covering a second multi-band, and a bypass conductor to bypass interference signals generated by the first antenna and the second antenna to the ground.

